

CLAIMS

1. A fish scaling machine comprising upper and lower conveyor means (16, 16') attached on a machine frame to convey fish bodies to be scaled while being held between them and water injection means (22 and/or 22') to inject
5 pressure water onto scales (102) of said fish bodies (100) on said conveyor means., said water injection means having more than two rows (28 and 30) of water injection nozzles disposed close to each other in a manner shifted to each other in a direction of conveyance of said fish bodies to continuously spray a water onto the same scale or scales of said fish body in more than two
10 stages in accordance with the conveyance of said fish body from the generally same direction, said water injection means characterized by further including water pressure adjustment sections (34) to apply a uniform pressure of water from said two rows of water injection nozzles in spite of variation in the surface of said fish body to be scaled.

15 2. A fish scaling machine comprising upper and lower conveyor means (16 and 16') attached on a machine frame to convey fish bodies to be scaled while being held between them and water injection means to inject pressure water onto scales (102) of said fish bodies (100) on the conveyor means; said water injection means having more than two rows of water injection nozzles
20 disposed close to each other in a manner shifted to each other in a direction of conveyance of said fish bodies to continuously spray a water onto the same scale or scales of the fish body in more than two stages in accordance with the conveyance of said fish body from the generally same direction; said water injection means characterized by further including water pressure
25 adjustment sections (34) to apply a uniform pressure of water from said rows of water injection nozzles in spite of variation in the surface of said fish body to be scaled and said more than two rows of water injection nozzles being disposed in a manner shifted from each other in a width direction.

3. A fish scaling machine as set forth in claim 1 or 2, and wherein said water injection means comprise upper and lower main water injection means located in the position corresponding to both sides of said fish body and upper and lower auxiliary water injection means located in the position
5 corresponding to the back and/or the belly of said fish body.

4. A fish scaling machine as set forth in either of claims 1 through 3, and wherein the pressure when the water injected from the forward and backward water injection nozzle rows of said water injection means is different from each other.

10 5. A fish scaling machine as set forth in either of claims 1 through 4, and wherein said water pressure adjustment section sets a constant distance from the opening ends of all the water injection nozzles to the respective surface portions of said fish body so that the water sprayed from all the water injection nozzles has the uniform pressure at the respective surface portions
15 of said fish body.

6. A fish scaling machine as set forth in claim 5, and wherein said water injection adjustment section sets said constant distance by selectively using a plurality of water injection nozzles previously prepared and having length different from each other.

20 7. A fish scaling machine as set forth in claim 5, and wherein said water injection adjustment section sets said constant distance by selectively using a plurality of water supply conduits (48) having the water injection nozzle connected thereto in a manner spaced in a longitudinal direction and having curvature different from each other or straightness.

25 8. A fish scaling machine as set forth in either of claims 1 through 4, and wherein said water pressure adjustment section adjust a water pressure so that the pressure water sprayed from all the water injection nozzles has the uniform pressure at the respective surface portions of said fish body.

9. A fish scaling machine as set forth in claim 8, and wherein said water injection adjustment section includes pressure adjustment valves (50A, 50B and 50C) separately provided between said respective water injection nozzles and said pressure water supply source and said pressure adjustment valves have an output water pressure value adjusted in accordance with the surface configuration of said fish body.

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